



# HISTORY NEWSLETTER

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HISTORICAL OFFICE (ACH)  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
WASHINGTON, D. C. 20546

April 19, 1974

Number 18

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For information only; not to be interpreted as an official directive

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## I. Personnel Changes

In the summer of 1973, Gene Emme was able to start on a long-deferred project: a history of NASA's first years. To allow him to give full time to writing, Monte D. Wright, formerly of the Department of History, USAF Academy, was hired as Director of the NASA Historical Office. Emme remains NASA Historian, with mail code ADA-2. Emme's research assistant is Alex Roland, a new Duke Ph.D.

After the reorganization of NASA Headquarters and the retirement of Dr. Homer Newell, the Historical Office reports to the Associate Administrator for Center Operations, Dr. George M. Low (Acting). Dr. Low is the Deputy Administrator and is therefore temporarily wearing two hats.

There have also been changes in the composition of the NASA Historical Advisory Committee. The new chairman is Walter Rundell of Maryland. Other members are Eugene Ferguson, Delaware; I. B. Holley, Duke; Thomas Hughes, Pennsylvania; Melvin Kranzberg, Georgia Tech; and Robert Multhauf, the Smithsonian Institution.

## II. The following is a status report on the projects in the NASA historical program as of April 1, 1974:

### BOOKS PUBLISHED IN 1973:

Patricia Davis and Carmen Brock-Smith, Astronautics and Aeronautics, 1970 (SP-4015)

Patricia Davis and Carmen Brock-Smith, Astronautics and Aeronautics, 1971 (SP-4016)

Mary Morse and Jean Bays, The Apollo Spacecraft Chronology, Vol. 2, (SP-4009)

Roland Newkirk, Skylab: Preliminary Chronology (HHN-130)

#### BOOKS IN OR ON THEIR WAY TO PRESS:

Patricia Davis and Carmen Brock-Smith, Astronautics and Aeronautics, 1972

Jane Van Nimmen and Leonard Bruno, The NASA Historical Data Book, 1958-68, Vol. 1

Helen Wells, Origins of NASA Names

Courtney Brooks and Ivan Ertel, The Apollo Spacecraft Chronology, Vol. 3

Patricia Davis and Nancy Brun, Astronautics and Aeronautics, 1973.

#### BOOKS IN COMMENT CYCLE:

Barton Hacker and James Grimwood, On the Shoulders of Titans: A History of Project Gemini

#### BOOKS IN RESEARCH AND WRITING:

David Balderston, History of NASA Technology Utilization	<u>Completion Date:</u> 1974
Roger Bilstein and Mitchell Sharpe, History of the Saturn Vehicle	1974
Walter Bonney, History of NACA	1976
Leonard Bruno, The NASA Historical Data Book, 1958-68, Vol. 2	1976
Patricia Davis and Nancy Brun, Astronautics and Aeronautics, 1974	1975
Eugene Emme, History of NASA, Vol. 1 (1958-1961)	1976
Ivan Ertel, The Apollo Spacecraft Chronology, Vol. 4	1975

Ivan Ertel, Courtney Brooks, and Roland Newkirk, The Skylab Chronology	1975
Charles Ezell, History of the Apollo-Soyuz Test Project	1976
Father William Faherty and Charles Benson, History of Apollo Launch Facilities and Operations	1974
Cargill Hall, Lunar Impact: Project Ranger (1959-65)	1974
Frank Jarrett, History of Kennedy Space Center	1975
Clayton Koppes, A History of the Jet Propulsion Laboratory	1977
Thomas Ray, History of Apollo Management	1975
John Sloop, History of Liquid Hydrogen as a Rocket Propellant	1975
Loyd Swenson, Courtney Brooks, and James Grimwood, Apollo's Chariots: A History of the Apollo Spacecraft Program	1975

#### BOOKS IN REDEFINITION:

History of Johnson Space Center  
 History of NASA Life Sciences  
 History of NASA Tracking Networks  
 History of Wallops Station  
 History of Lunar Orbiter

#### BOOKS IN DEFINITION:

History of Lunar Exploration  
 History of Skylab  
 Impact of Space Exploration on Man's Ideas  
 Development History of Centaur

For some time publications distribution has been a heavy if occasional workload for our small staff. In an effort to reduce this workload and to avoid possible duplicate mailings we have folded our mailing list in with NASA's larger computer operated mailing list for all scientific and technical publications. There are bound to be some names that fall through the cracks in this process. If any of you who have been on our distribution list in the past and would like to continue receiving our publications suddenly find yourselves in limbo this year, please let us know. We'll scold the computer and it will coldly tell us it was all our fumble-fingered fault at the input stage. But then, we trust, it will relent and restore you to your accustomed state of grace.

### III. NASA Summer History Seminar, 1973

Our 11th NASA Summer History Seminar was conducted in 1973. There were two returnees from previous summers: Jerry Van Voorhis (Johns Hopkins) and Professor Larry Zigler from Eastern Baptist College, Pennsylvania. Van Voorhis continued his work on "Technology, Policy, and the Aircraft Industry." Zigler continued his "History of the Mississippi Test Facility and Michoud". Other members and their research subject: Richard Le Baron (George Washington University), the origins of the Apollo-Soyuz project; Nickolaus Leggett (Johns Hopkins University), a study of selected NASA projects and how they were originated and moved through the organization to the status of approved projects; Steven Selss (City College, New York), earth resources program and urban planning; and Daniel Masten (Vanderbilt University), the evolution of the space rescue and return treaty in the U.N. Professor Melvin Kranzberg (Georgia Tech), long a member of the NASA Historical Advisory Committee, spent a day with the seminar.

Some 30 applications for this summer's seminar had been received by the 15 March deadline. Selections will be made soon.

### IV. Archives:

Over 100 persons researched in the Headquarters Historical Archives during the past year, and several hundred historical queries were answered. Some of the more outstanding research topics were: 1) a history of the

communications satellite by Dr. Del Smith; 2) Skylab chronology by Courtney Brooks and Roland Newkirk; 3) history of NACA by Walt Bonney; 4) History of liquid hydrogen propulsion by John Sloop; 5) lifting body research by Richard Hallion; 6) Soviet space research by Jim Oberg. Oral history interviews continue to be accessioned by the Archives, most of these deriving from ongoing research for NASA histories.

The process of assimilation and screening of archival material continues. 53 boxes of record material pertaining to Apollo and the Life Sciences were retired to the Federal Records Center, Suitland Md., for permanent retention. A considerable number of cabinets of material inherited from retired NASA staff members was screened for historically important documentation, and the rest destroyed. This isn't considered record material according to the definition in the Records Management Retirement Schedules--i.e., chronological reading files, newspaper clippings, transcripts, photographs, etc. This screening is continuous.

The catalog of the Papers of Dr. Hugh L. Dryden to be published by the Milton Eisenhower Library of Johns Hopkins University is in press and will be available this spring. These papers, collected, collated, and cataloged by Dr. Richard K. Smith under a NASA grant, will be open to qualified researchers following the ceremonial opening on 15 May 1974.

A concerted effort is being made to declassify as much of the Archives as is possible under the revised declassification procedures outlined in Executive Order 11652 of 8 March 1972.

The NASA Historical Advisory Committee recommended that we consider publishing a selected group of historically significant documents in the form of a source data book that would be of particular use in courses such as historiography, public policy history of technology, etc. At the end of the year a call went out to all hands for their nominations for inclusion in this volume. Work toward publication of this book will continue during 1974.

# V. Professional Notes:

The National Air and Space Museum of the Smithsonian Institution is rapidly taking shape on the Mall. Almost all the structural steel has been emplaced, and the stone facing on three of the modules of the museum has been completed. Thus far they are hoping to meet the officially set opening date of 4 July 1976. Planning for exhibits in the new halls is continuing.

The winners of the 1973 Robert H. Goddard Historical Essay Competition of the National Space Club were announced: Dr. Norriss S. Hetherington, Kansas University, Lawrence, Kansas, "Winning the Initiative: NASA and the U.S. Space Science Program, 1958-1960," and co-winning essay "The Dryden-Blagonravov Era of Space Cooperation, 1962-65," by Dr. James A. Malloy, American University, Washington, D.C. Two honorable mentions went to Mr. P. Thomas Carroll, University of Pennsylvania, Philadelphia, "Historical Origins of the Sergeant Missile Powerplant," and Dr. Friedwardt Winterberg, Black Springs, Nevada, "Hermann Ganswindt: Forgotten First Space Flight Pioneer."

The 7th International History of Astronautics Symposium met in Baku, U.S.S.R. 7-13 October 1973. Organizing Chairmen were Dr. Eugene Emme of NASA and V. N. Sokolsky of the U.S.S.R. The First Session was composed of the following: Thurs. 11 October 1973.

From Hermes to the International Geophysical Year,  
by R. W. Porter, U.S.

From Back Fire to Explorer I, by K. Debus, Director,  
Kennedy Space Center, U.S.

From the History of Rocketry in Austria, by E. Dolezal,  
Austria

R. H. Goddard: Accomplishments of the Roswell Years  
(1930-1941), by F. C. Durant, U.S.

The Development of Space Transportation Within A  
Historical Frame of Reference, by H. H. Koelle,  
West Berlin

The Main Streams of Development of Mechanics of  
Variable Mass Particles (1930-1970), by  
A. A. Kosmodemyansky, U.S.S.R.

Professional Notes (continued):

Some Aspects of the History of the Organization of the Rocket Research Institute, by Yu. A. Pobedonostsev, E. S. Shchetinkov, V. N. Galkovsky, U.S.S.R.

Second Session: Friday, Oct. 12, 1973

High Energy Propulsion at NACA Lewis Engine Research Laboratory, by J. Sloop, U.S.

The Analysis of Multi-Stage Rockets, described in the works of the XVI-XVII Centuries, by M. Subotowicz, Poland

From the History of the Development of the First Earth Satellite, by M. K. Tikhonravov, U.S.S.R.

Treatment of the Inertial Navigation Problem, by L. I. Tkackev, I. A. Mykhalev, N.N. Butenin, U.S.S.R.

Early Rocket Experiments on Cosmic Ray Investigation, by S. N. Vernov, L. A. Vedeshin, U.S.S.R.

Early Photography from Rockets, by F. Winter, U.S.

The Development of Automatic Guidance Systems in the U.S.S.R., by B. V. Raushenbakh, U.S.S.R.

It is anticipated that these papers will be published.

Dr. Fritz Zwick died of a heart attack 10 February 1974. He was one of the pioneers in early propulsion work at Jet Propulsion Laboratory, Pasadena, California. He founded the Aerojet-General Corporation of which he became research director. Recently he had been studying exploding stars.

On 27 April Dr. Emme participated in the annual history symposium held at the U.S. Naval Academy, Annapolis, Maryland. On 21 November he discussed the early history of NASA at the Lunch Box Symposium at the National Air and Space Museum, Smithsonian Institution.

Professional Notes (continued):

1973 saw several highly favorable reviews of the book Most Probably Position (The University Press of Kansas, 1972, 280 pp), by the Director of the NASA Historical Office, Dr. Monte D. Wright.

Dr. Gerard P. Kuiper died 24 December 1973. He was a pioneer in solar astronomy. His research led to the application of infrared techniques to planetary research, the discovery of two planetary satellites, and numerous other astronomical "firsts."

For some years the Fédération Aéronautique Internationale (FAI) has functioned as the official international sanctioner of aeronautical and manned space flight records. At the 1972 meeting of national representatives a proposal by the U.S.S.R. to include unmanned space records was approved. The first step of course was to catch up on previous accomplishments in unmanned space flights from 1957 to the present. Each nation with an active space program was asked to submit for evaluation a list of nominations for space "firsts" in its program. The U.S. member organization in FAI, the National Aeronautic Association, asked its representatives--Sigurd A. Sjöberg and Carl W. Hess of Johnson Space Center--to draft the U.S. list and coordinate it with participating agencies. The NASA Historical Office assisted with the verification of the nominations--over 50 in number. The revised list has been submitted to the FAI. One of the interesting sidebars to this experience was to note how much prestige and significance European nations attach to this kind of record reckoning.

A somewhat analogous experience in data collection was the request from V. N. Sokolsky of the U.S.S.R., on behalf of the International Academy of Astronautics, for a report on space-related historical research performed in the U.S. in 1972 and 1973. This was implementation of a resolution for such an international compilation passed at the Baku meeting in October 1973. Cargill Hall, our intrepid JPL historian and for several years the U.S. compiler for the IAA's annual chronology of international space events, undertook this additional assignment with the assistance of our office and others. In the process of compilation he and we became painfully aware that (a) historical research in the U.S. is the epitome of democratic decentralization and (b) unlike some of the long-established fields of history, the infant space-related history field had no mechanism which consolidated reporting of on-going space-related



historical research. Since we can expect that the IAA request will be repeated annually, we have a self-protective reason for wanting such a mechanism to exist. But it is safe to assume that, as in other fields of history, there are many persons to whom such information would be useful. We will be soliciting advice as to the best vehicle for such information. As an interim measure, and with no illusions as to its adequacy we offer the services of this modest Newsletter. A form is appended; we hope all recipients who have knowledge of space-related research projects aside from those in the NASA program will take a moment to fill in the form and return it to us. In turn we will consolidate these and publish the list.

On 24 September 1973 at a meeting in Boston the following were named to head the AIAA History Committee:

Chairman

Ralph B. Oakley  
Space Division Historian  
Rockwell International  
Downey, California 90241

Vice-Chairman

David W. H. Godfrey  
Ryerson Polytechnical  
Institute  
Ontario, Canada

The Robert H. Goddard Historical Essay Award for 1974 is now open for competitive entries. Any U.S. citizen may submit an essay on any significant aspect of the historical development of rocketry and astronautics in the U.S. They will be judged on their originality and scholarship. Entries, not to exceed 5000 words, should be submitted by 1 November 1974 to the Goddard Historical Essay Contest, c/o National Space Club, 1629 K Street, N.W., Washington, D.C. 20006. The winner, to be announced at the Awards Ceremony early in 1975, will receive the Goddard Historical Essay Trophy, Certificate, and a \$500 prize. Competition rules may be obtained from the National Space Club.

#### VI. Readings of Note:

Aldrin, Col. Edwin E. "Buzz," Jr., with Wayne Warga.  
Return to Earth. New York: Random House, 1973, 338 pp., \$7.95. Astronaut Aldrin gives an "inside look" into the story of man's first landing on the moon in Apollo 11 and his personal experience afterward.

- Berendzen, Richard, ed. Life beyond Earth & the Mind of Man (NASA SP-328). Washington, D.C.: Government Printing Office, 1973, 106 pp., \$1.25. Symposium held at Boston University 20 November 1973, sponsored by NASA and Boston University, explored implications of the possibility of extraterrestrial life and communications with distant planets.
- Betz, W. D. "Astronomy from an X-ray Satellite: Measuring the Mass of a Neutron Star," Science, Vol. 179 (2 March 1973), pp. 884-885. Results from Explorer 42 Small Astronomy Satellite (launched in 1970) and OSO 7 Orbiting Solar Observatory (launched in 1971) "have had a greater influence on astronomy in the first few years than the 200-inch telescope on Mount Palomar did."
- Bienkowska, B., ed. The Scientific World of Copernicus: On the Occasion of the 500th Anniversary of His Birth, 1473-1973. Translated from the Polish by C. Cenkalska. Dordrecht, Holland; and Boston: D. Reidel Publishing Co., 1973, 144 pp., bibliography, \$19.50. The life and work of the Polish astronomer against the background of his time, with an examination of effects of his discoveries on methodology, culture, literature, philosophy, and religion.
- Boyle, Charles P. Space Among Us: Some Effects of Space Research on Society (Goddard Space Flight Center X-207-72-27). Washington, D.C.: Government Printing Office, June 1973, 133 pp., cloth cover \$9.00, microfiche from National Technical Information Service, \$0.95.
- Bradbury, Ray; Arthur C. Clarke; et al. Mars and the Mind of Man. New York: Harper & Row, 1973; Toronto: Fitzhenry & Whiteside Ltd., 1973, 143 pp. illus.) Panel discussion held November 1971 at California Institute of Technology as NASA's Mariner 9 probe neared Mars, with afterthoughts written October 1972 after the spacecraft had returned 7500 pictures and a great amount of data on the planet.
- Clarke, Arthur C.; paintings by Chesley Bonestell. Beyond Jupiter: The Worlds of Tomorrow. Boston, Toronto: Little, Brown & Co., 1972, 89 pp., \$12.95. A projection of what a space probe might see on a tour of all the outer planets of the solar system during their alignment in the late 1970s, with a review of preceding spacecraft technology and existing planetary knowledge.

\_\_\_\_\_. "Technology and the Limits of Knowledge." Lecture in the Frank Nelson Doubleday Series for 1972-1973, National Museum of History and Technology, Smithsonian Institution, 15 March 1973, 36 pp.

Cooper, Henry S. F., Jr. 13: The Flight That Failed. New York: Dial Press, 1973, 199 pp., \$5.95. The story of Apollo 13's aborted lunar landing mission and near disaster and the role of human judgment and responsibility in the achievements of technology.

\_\_\_\_\_. "A Reporter at Large: Skylab," New Yorker, 5 May 1973, pp. 110-135. A prelaunch review.

Emme, Eugene M. "Space and the Historians," Space-flight, Vol. 15 (November 1973), pp. 411-417. Based on a series of lectures to historical and engineering groups in the past several years.

Fletcher, James C. "Are Skylab and the Space Shuttle Worth the Investment?" Government Executive, Vol. 6, No. 1 (January 1974), pp. 38-42. NASA's Administrator predicts effects of Skylab results on America's future in space and foresees many uses of the shuttle with multiple and reusable payloads, concluding shuttle benefits should be much greater than Apollo's over a longer time.

\_\_\_\_\_. "ERTS-1: Toward Global Monitoring," Astronautics and Aeronautics, Vol. 11, No. 9 (September 1973), pp. 32-35. Following a year of experience with Earth Resources Technology Satellite 1, the NASA Administrator discusses new investigations for the future, giving attention to pollution monitoring, geological studies, heat-balance surveys, and storm damage analysis.

Francis, Devon. Mr. Piper and His Cubs. Ames: Iowa State University Press, 1973, 256 pp., illus., \$7.95. The story of the lightplane industry before World War II.

Frisch, B. "IAS's 40th Anniversary," Astronautics and Aeronautics, Vol. 10, No. 11 (November 1972), pp. 77-78.

Goldstine, Herman H. The Computer from Pascal to von Neumann. Princeton: Princeton University Press, 1972, 378 pp., \$12.50. A remarkable history to 1957,

combining a focus on ideas and people with an understanding of the technology.

Heiman, Grover, Jr. Aerial Photography: The Story of Mapping and Reconnaissance. New York: Macmillan, 1972, 180 pp., \$5.95. A volume in the Air Force Academy series.

"Immanuel Velikovsky Reconsidered," Pensee (issued by Student Academic Freedom Forum), three issues to Winter 1973. Contains numerous unpublished writings of Velikovsky and articles on his theories, theories largely rejected by the scientific establishment. Review of Velikovsky's lecture at NASA Ames Research Center, by Richard Haines, is in Vol. 2. A reference for historians of antiquity.

James, Peter N. Soviet Conquest from Space. New Rochelle, N.Y.: Arlington House, 1974, 256 pp. A former space analyst with Pratt & Whitney Division, United Aircraft Corp., makes predictions of Soviet space achievements, including a space shuttle, and criticizes U.S. space and defense planners for leaving the new frontier "to the Russians."

Kranzberg, Melvin. "Historical Perspectives on the Space Program," The Georgia Tech Alumnus, Spring 1973, pp. 8-11. A thoughtful beginning of assessment of the historical meaning of Apollo.

Lebedev, L., B. Lyk'yanov, and B. Romanov. Sons of the Blue Planet (NASA TT F-728). New Delhi: Amerind Publishing Co. Pvt. Ltd., 1973. Published for NASA and the National Science Foundation; available from National Technical Information Service. Translation of Syny Goluboi Planety (Moscow: Political Literature Press, 1971). Narrative account of the Soviet cosmonauts, their lives, aspirations, and exploits.

Melton, E. "Twenty-five Years of 'Skyhook'," Naval Research Reviews, Vol. 26 (February 1973), pp. 1-11. Summary of Office of Naval Research balloon investigations, 1948-1973.

Murphy, Thomas P. "Congressional Liaison: The NASA Case," Western Political Quarterly, Vol. 25, No. 2 (June 1972), pp. 192-214.

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. "Federal Regulatory Policy and Communications Satellites: Investing the Social Dividend," American Journal of Economics and Sociology, Vol. 31, No. 4 (October 1972), pp. 337-351. Former Assistant to NASA Administrator traces the rise of the concept of a domestic satellite system, competition, and Government policy.

NASA, Goddard Space Flight Center. Significant Accomplishments in Sciences, Goddard Space Flight Center, 1972 (NASA SP-331). Washington, D.C.: Government Printing Office, 1973, 223 pp., illus., \$3.00. Proceedings of a symposium held at GSFC 7-8 November 1972, covering high energy and solar astronomy; optical and ultraviolet astronomy; planetary, lunar, and cometary studies; earth observations; and earth physics.

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. Significant Accomplishments in Technology, Goddard Space Flight Center, 1972 (NASA SP-326). Washington, D. C.: Government Printing Office, 1973, 207 pp., illus., \$3.00. Proceedings of a symposium held at GSFC 7-8 November 1972, covering spacecraft and vehicle technology, sensor technology, ground operations, and communications and navigation.

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. Symposium on Significant Results Obtained from the Earth Resources Technology Satellite-1, Vol. 1, Technical Presentations (NASA SP-327), Sections A and B. Washington, D. C.: Government Printing Office, 1973, 2 sections, 1750 pp., \$13.65 per set. Proceedings of a conference sponsored by GSFC at NASA Headquarters and New Carrollton, Md., 5-9 March 1973, reporting on first few months of ERTS 1 pictorial data. Technical papers presented on agriculture, forestry, range resources, mineral resources, geological structures and land-form surveys, water resources, land use and mapping, interpretation techniques, marine resources and ocean surveys.

National Aeronautics and Space Administration, Johnson Space Center. Apollo 17: Preliminary Science Report (NASA SP-330). Washington, D.C.: Government Printing Office, 1973, 600 pp., many illus.

Naugle, John E., and R. W. Johnson. "Space Science Plans for the Shuttle Era," Astronautics and Aeronautics, Vol. 11, No. 5 (May 1973), pp. 34-39. Modes of using the space shuttle identified, including establishment of automated space labora-

tories and support of exploratory research and instrument development, with prospects of European cooperation.

- Newhouse, John. Cold Dawn: The Story of SALT. New York: Holt, Rinehart and Winston, 1973, 302 pp., \$7.95. An account of the politics behind the 1972 strategic arms limitation agreements.
- Paterson, A. M. "Giordano Bruno's View on the Earth without a Moon," Pensee, Vol. 3 (Winter 1973), pp. 46-47. Analysis of 16th century Italian philosopher.
- Petrov, G. I., ed. Conquest of Outer Space in the USSR: Official Announcements by Tass and Material Published in the National Press from October 1967 to 1970. (NASA TT F-725). New Delhi: Amerind Publishing Co. Pvt. Ltd., 1973, 444 pp. Published for NASA and the National Science Foundation. Translated from the Russian volume Osvoenie Kosmicheskogo Prostranstva v SSR (Moscow: Nauka Press, 1971). As subtitle indicates, a compilation of Russian press coverage of their space program.
- Pogue, Forrest C. George C. Marshall: Organizer of Victory, 1943-1945. New York: Viking Press, 1973, 683 pp., \$15.00. The third, generally heralded as the best, volume of Pogue's biography of General Marshall. Pogue says, "I have been forced to conclude that biography is not the same as history and that one may sometimes better grasp the nature of one's subject by subordinating the details of historical narrative to the impact of the individual on a given influence or on a precise event."
- Riabchikov, Evgeny I. Russians in Space, translated from the Russian by Guy Daniels. Garden City, N.Y.: Doubleday & Co., 1971, 300 pp., illus. Popular-style Novosti Press volume, including 153 photographs from Sputnik to Salyut. The book is now being remaindered.
- Roberts, Chalmers M. "Fifteen Years Later: Reflections on a Top Secret Report," Washington Post, Feb. 4, 1973, p. A-16. Author of the Dec. 20, 1957, disclosure of the Gaither Report of November 1957, now declassified, reviews the urgent recommendations made for a crash missile, space, and civil defense program.

"Rocketry in the 50s," Astronautics and Aeronautics, Vol. 10, No. 10 (October 1972), pp. 38-65. Extracts from papers by panel of key participants, AIAA Eighth Annual Meeting, Washington, D.C., Oct. 28, 1971: Milton W. Rosen on Viking and Vanguard, William H. Pickering on Explorer 1, William R. Lucas on U.S. Army missiles, John L. Sloop on liquid rocket fuel, General Bernard A. Schriever on U.S. Air Force ballistic missile and space programs, L/G Samuel C. Phillips on Minuteman and solid fuel, R/A William F. Raborn on Polaris. Chaired by Wernher von Braun.

Rotblat, Joseph. Scientists in the Quest for Peace. Cambridge: MIT Press, 1972, 399 pp., \$12.50. Documentary of the 21 Pugwash Conferences since 1957.

Saegesser, Lee D. "Space Humor," Astrophile, Vol. 16, No. 7 (May 1973). First of a continuing series by the NASA Archivist on humorous happenings pertaining to space, published every two months and continuing in 1974.

Sheldon, Charles S., II. United States and Soviet Progress in Space: Summary Data Through 1972 and a Forward Look (Report 73-69 SP). Washington, D.C.: Library of Congress, Congressional Research Service, 29 Jan. 1973, 73 pp. New edition of what has become an annual review summarizes how far the two major space powers have come in the last 15 years, examines comparative aspects of the two programs, and looks at possible future developments.

Stoldt, Norman W., and Peter J. Havanac. Compendium of Meteorological Satellites and Instrumentation (NSSDC 73-02). Greenbelt, Md.: NASA Goddard Space Flight Center, July 1973, 486 pp. Prepared by U.S. Air Force Environmental Technical Applications Center, Air Weather Service (MAC), for the National Space Science Data Center at Goddard. An overview of metsat programs and brief description, orbital information, and operating status of 98 launched and planned satellites--since 1959--of the U.S., U.S.S.R., France, and U.K., with more than 200 experiments. Bibliography.

Ulsamer, Edgar. "Skylab Opens the Age of Space Exploration, Air Force and Space Digest, February 1973, pp. 25-30. A prelaunch review.

von Braun, Wernher. "Space in the 1980's, Spaceflight, Vol. 15, No. 1 (January 1973), pp. 2-10. Based on the paper "Benefits from Space Applications in the 80's" presented at a symposium of the American Astronautical Society.

Webre, Gil. Three articles on history of NASA's Mississippi Test Facility, Dixie Roto Magazine, New Orleans La., Times-Picayune: "MTF...after Rocket's Brief Flare," 24 June 1973, pp. 12-21; "MTF's Role in the '70s: Space Technology Here on Earth," 8 July 1973, pp. 10-17; "Infrared Revelations," 7 October 1973, pp. 12-14, 16-17, 18-19.

Winter, Frank H. "William Hale: A Forgotten British Rocket Pioneer," Spaceflight, Vol. 15, No. 1 (January 1973), pp. 31-33.

Yefremov, Yu. I., ed. Space Research Performed in the USSR in 1972 (JPRS 59778). Arlington, Va.: Joint Publications Research Service, 13 August 1973, 107 pp.; available from National Technical Information Service, Springfield Va. 22151, U.S. \$7.50. Translation of Russian-language report Kosmicheskiye Issledovaniya, Vypolnennyye v SSSR v 1972 Godu, 1973, presented to the 16th Session of the Committee on Space Research (COSPAR), which met in Constance, West Germany, in May 1973.

Finally, we could not leave off our bibliography without a note from the department of intellectual curiosities: the sudden spate of more and less respectable books reinterpreting the history of civilization in terms of the visitations to Earth by outer-space astronauts in prehistoric times or by a series of cataclysmic cosmic near misses. Whatever the degree of reserve with which these sweeping claims have been received in professional circles--anthropological, historical, theological, and others--there is no doubt of the wide public interest which has propelled several of the books into movie and TV versions and made a number of the authors hot items



on the lecture circuit. In the certain knowledge that this list will be obsolescent by the time you next glance at a drugstore newstand, herewith is a representation sampling of titles:

Blumrich, Josef F. The Spaceships of Ezekiel (Bantam Book, 1971) 163 pp, \$1.25.

Drake, W. Raymond. Gods and Spacemen in the Ancient East (Signet 1973) 247 pp, \$1.50.

Kolosimo, Peter. Not of This World (Bantam, 1971) 248 pp, \$1.25.

Landsburg, Alan & Sally. In Search of Ancient Mysteries (Bantam, 1974) 197 pp, \$1.50.

Tomas, Andrew. We Are Not the First (Bantam, 1971) 176 pp, \$1.25

Velikovsky, Immanuel, Earth in Upheaval (Dell, 1972) [first printed in 1950] 290 pp, \$1.95.

Velikovsky, Immanuel, Worlds in Collision (with a new introduction by the author) (Dell, 1973) [first printed in 1955] 400 pp, \$1.25.

Von Daniken, Erick. Chariots of the Gods? (Bantam Book, 1971) 163 pp, \$1.25.

Von Daniken, Erick. Gods from Outer Space (Bantam Book, 1970) 180 pp. \$1.25.

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(Date)

NASA Historical Office  
NASA Headquarters (ACH)  
Washington, D. C. 20546

Gentlemen:

As requested in your recent Newsletter, I submit the following list of projects in space-related historical research:

<u>Name of researcher(s)</u>	<u>Affiliation/ Location</u>	<u>Topic/ Title</u>	<u>Purpose (Dissertation book, etc.)</u>
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(Signature)